

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): An apparatus comprising:

a pipeline resource having a plurality of address spaces, each of the plurality of address spaces corresponding to one of a plurality of address space identifiers, the pipeline resource including entries each including one of the plurality of address space identifiers, wherein the entries are selectively flushable on an address space basis; and

a filter coupled to the pipeline resource to select at least one of the entries of the pipeline resource to be flushed, the filter to cause one of the plurality of address spaces in the pipeline resource to be flushed while the other address spaces are maintained.

Claim 2 (canceled)

Claim 3 (previously presented): The apparatus of claim 1, further comprising a control register coupled to the pipeline resource to provide the plurality of address space identifiers to the entries.

Claim 4 (canceled)

Claim 5 (previously presented): The apparatus of claim 1, wherein the entries further include a thread identifier.

Claim 6 (previously presented): The apparatus of claim 1, wherein the pipeline resource comprises a translation lookaside buffer.

Claim 7 (canceled)

Claim 8 (canceled)

Claim 9 (canceled)

Claims 10 - 11 (canceled)

Claim 12 (canceled)

Claims 13 - 14 (canceled)

Claim 15 (canceled)

Claim 16 (previously presented): A system comprising:

a processor including a pipeline resource including a plurality of entries each having one of a plurality of address spaces, each of the plurality of address spaces corresponding to one of a plurality of address space identifiers, and a filter coupled to the pipeline resource to flush the entries of one of the plurality of address spaces while the entries of the other address spaces are maintained in the pipeline resource;

a hashing engine to hash one of the plurality of address space identifiers with a portion of a value to be stored in one of the entries; and

a dynamic random access memory coupled to the processor.

Claim 17 (original): The system of claim 16, further comprising a control register coupled to the pipeline resource to provide the plurality of address space identifiers to the pipeline resource.

Claims 18 - 19 (canceled)

Claim 20 (previously presented): An article comprising a machine-readable storage medium containing instructions that if executed enable a system to:

associate an address space identifier with a value;

store the value and the address space identifier in an entry of a pipeline resource;

store the value and the address space identifier in an entry of a filter coupled to the pipeline resource;

receive an address space identifier and an address from a senior store or a snoop and determine whether the address and the address space identifier match an entry in the filter;

update an entry in a control register coupled to the filter corresponding to the filter entry if the comparison results in a match; and

thereafter flush a portion of the pipeline resource, the portion including the entry and other entries having the same address space identifier.

Claim 21 (canceled)

Claim 22 (original): The article of claim 20, further comprising instructions that if executed enable the system to store a thread identifier in the entry.

Claim 23 (original): The article of claim 20, further comprising instructions that if executed enable the system to associate a different address space identifier with a second value, the different address space identifier corresponding to a different active context than the address space identifier.

Claim 24 (original): The article of claim 20, further comprising instructions that if executed enable the system to invalidate the entry if the value is updated during a context.

Claims 25 - 31 (canceled)

Claim 32 (previously presented): The article of claim 24, further comprising instructions that if executed enable the system to flush the portion of the pipeline resource on a next context switch after the invalidation.

Claim 33 (canceled)

Claim 34 (previously presented): The apparatus of claim 1, wherein the filter is to store a plurality of filter entries each including a pair of valid indicators, an address space identifier, and a thread identifier.

Claim 35 (previously presented): The apparatus of claim 34, wherein the first valid indicator of a filter entry is to be written if no conflicting invalidity access occurs on an address match to the filter entry and the second valid indicator of the filter entry is to be written if a conflicting invalidity access occurs on the address match.

Claim 36 (previously presented): The apparatus of claim 1, further comprising a control register coupled to the filter, the control register having an entry for each entry of the filter, wherein a control register entry is to be updated if an address matches the corresponding entry of the filter.

Claim 37 (previously presented): The apparatus of claim 36, wherein the address is a post-retirement store address.

Claim 38 (previously presented): The system of claim 16, wherein the filter is to store a plurality of filter entries each including an address space identifier and a thread identifier.

Claim 39 (previously presented): The system of claim 38, wherein the plurality of filter entries are to further each include a pair of valid indicators.

Claim 40 (previously presented): The system of claim 39, wherein the first valid indicator of a filter entry is to be written if no conflicting invalidity access occurs on an address match to the filter entry and the second valid indicator of the filter entry is to be written if a conflicting invalidity access occurs on the address match.

Claim 41 (previously presented): The system of claim 17, further comprising a second control register coupled to the filter, the second control register having an entry for each

entry of the filter, wherein the second control register entry is to be updated if an address matches the corresponding entry of the filter.

Claim 42 (previously presented): The system of claim 41, wherein the address is a post-retirement store address.